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TECH CENTER 1600/2900

1600

RAW SEQUENCE LISTING                    DATE: 10/01/2002
PATENT APPLICATION:  US/09/441,411      TIME: 15:46:17

Input Set : D:\409.app.txt
Output Set: N:\CRF4\10012002\I441411.raw

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 4 <110> APPLICANT: Scholler, Nathalie B.
 5        Disis, Mary L.
 6        Hellstrom, Ingegerd
 7        Hellstrom, Karl Erik
 9 <120> TITLE OF INVENTION: SURFACE RECEPTOR ANTIGEN VACCINES
12 <130> FILE REFERENCE: 730033.409
14 <140> CURRENT APPLICATION NUMBER: US 09/441,411
15 <141> CURRENT FILING DATE: 1999-11-16
17 <160> NUMBER OF SEQ ID NOS: 26
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23 <212> TYPE: DNA
24 <213> ORGANISM: Artificial Sequence
26 <220> FEATURE:
27 <223> OTHER INFORMATION: PCR primer
29 <400> SEQUENCE: 1
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33 <211> LENGTH: 29
34 <212> TYPE: DNA
35 <213> ORGANISM: Artificial Sequence
37 <220> FEATURE:
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45 <212> TYPE: DNA
46 <213> ORGANISM: Artificial Sequence
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49 <223> OTHER INFORMATION: PCR primer
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56 <212> TYPE: DNA
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59 <220> FEATURE:
60 <223> OTHER INFORMATION: PCR primer
62 <400> SEQUENCE: 4
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65 <210> SEQ ID NO: 5
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Input Set : **D:\409.app.txt**
Output Set: **N:\CRF4\10012002\I441411.raw**

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73 gccctcccag ccgggtccag ccggagccat ggggccggag ccgcagtgag caccatggag   180
74 ctggcggcct tgtgccgctg ggggctcctc ctcgccctct tgcccccccgg agccgcgagc   240
75 acccaagtgt gcaccggcac agacatgaag ctgcggctcc ctgccagtcc cgagacccac   300
76 ctggacatgc tccgccacct ctaccagggc tgccaggtgg tgcagggaaa cctggaactc   360
77 acctacctgc ccaccaatgc cagcctgtcc ttcctgcagg atatccagga ggtgcagggc   420
78 tacgtgctca tcgctcacaa ccaagtgagg caggtccac  tgcagaggct gcggattgtg   480
79 cgaggcaccc agctctttga ggacaactat gccctggccg tgctagacaa tggagacccg   540
80 ctgaacaata ccacccctgt cacaggggcc tccccaggag gcctgcggga gctgcagctt   600
81 cgaagcctca cagagatctt gaaaggaggg gtcttgatcc agcggaaccc ccagctctgc   660
82 taccaggaca cgattttgtg gaaggacatc ttccacaaga caaccagct  ggctctcaca   720
83 ctgatagaca ccaaccgctc tcgggcctgc caccccctgtt ctccgatgtg taagggctcc   780
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96 ctgaccctgc aagggctggg catcagctgg ctggggctgc gctcactgag ggaactgggc  1560
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114 tatggctgcc tcttagacca tgtccgggaa aaccgcggac gcctgggctc ccaggacctg  2640
115 ctgaactggt gtatgcagat tgccaagggg atgagctacc tggaggatgt gcggctcgta  2700
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119 agtgatgtgt ggagttatgg tgtgactgtg tgggagctga tgacttttgg ggccaaacct    2940
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139 aaccttcctt cctgcttgag ttcccagatg gctggaaggg gtccagcctc gttggaagag    4140
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141 agtggatgcc acagcccagc ttggcccttt ccttccagat cctgggtact gaaagcctta    4260
142 gggaagctgg cctgagaggg gaagcggccc taaggagtg tctaagaaca aaagcgaccc    4320
143 attcagagac tgtccctgaa acctagtact gccccccatg aggaaggaac agcaatggtg    4380
144 tcagtatcca ggctttgtac agagtgcttt tctgtttagt ttttactttt tttgttttgt    4440
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148 <211> LENGTH: 1255
149 <212> TYPE: PRT
150 <213> ORGANISM: Homo sapiens
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155 Pro Pro Gly Ala Ala Ser Thr Gln Val Cys Thr Gly Thr Asp Met Lys
156              20                  25                  30
157 Leu Arg Leu Pro Ala Ser Pro Glu Thr His Leu Asp Met Leu Arg His
158          35                  40                  45
159 Leu Tyr Gln Gly Cys Gln Val Val Gln Gly Asn Leu Glu Leu Thr Tyr
160      50                  55                  60
161 Leu Pro Thr Asn Ala Ser Leu Ser Phe Leu Gln Asp Ile Gln Glu Val
162 65                  70                  75                  80
163 Gln Gly Tyr Val Leu Ile Ala His Asn Gln Val Arg Gln Val Pro Leu
164              85                  90                  95
165 Gln Arg Leu Arg Ile Val Arg Gly Thr Gln Leu Phe Glu Asp Asn Tyr
166              100                 105                 110
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167 Ala Leu Ala Val Leu Asp Asn Gly Asp Pro Leu Asn Asn Thr Thr Pro
168         115                 120                 125
169 Val Thr Gly Ala Ser Pro Gly Gly Leu Arg Glu Leu Gln Leu Arg Ser
170         130             135                 140
171 Leu Thr Glu Ile Leu Lys Gly Gly Val Leu Ile Gln Arg Asn Pro Gln
172 145             150                 155                 160
173 Leu Cys Tyr Gln Asp Thr Ile Leu Trp Lys Asp Ile Phe His Lys Asn
174             165                 170                 175
175 Asn Gln Leu Ala Leu Thr Leu Ile Asp Thr Asn Arg Ser Arg Ala Cys
176             180                 185                 190
177 His Pro Cys Ser Pro Met Cys Lys Gly Ser Arg Cys Trp Gly Glu Ser
178         195                 200                 205
179 Ser Glu Asp Cys Gln Ser Leu Thr Arg Thr Val Cys Ala Gly Gly Cys
180         210             215                 220
181 Ala Arg Cys Lys Gly Pro Leu Pro Thr Asp Cys Cys His Glu Gln Cys
182 225             230                 235                 240
183 Ala Ala Gly Cys Thr Gly Pro Lys His Ser Asp Cys Leu Ala Cys Leu
184             245                 250                 255
185 His Phe Asn His Ser Gly Ile Cys Glu Leu His Cys Pro Ala Leu Val
186             260                 265                 270
187 Thr Tyr Asn Thr Asp Thr Phe Glu Ser Met Pro Asn Pro Glu Gly Arg
188             275                 280                 285
189 Tyr Thr Phe Gly Ala Ser Cys Val Thr Ala Cys Pro Tyr Asn Tyr Leu
190         290             295                 300
191 Ser Thr Asp Val Gly Ser Cys Thr Leu Val Cys Pro Leu His Asn Gln
192 305             310                 315                 320
193 Glu Val Thr Ala Glu Asp Gly Thr Gln Arg Cys Glu Lys Cys Ser Lys
194             325                 330                 335
195 Pro Cys Ala Arg Val Cys Tyr Gly Leu Gly Met Glu His Leu Arg Glu
196             340             345                 350
197 Val Arg Ala Val Thr Ser Ala Asn Ile Gln Glu Phe Ala Gly Cys Lys
198         355                 360                 365
199 Lys Ile Phe Gly Ser Leu Ala Phe Leu Pro Glu Ser Phe Asp Gly Asp
200         370             375                 380
201 Pro Ala Ser Asn Thr Ala Pro Leu Gln Pro Glu Gln Leu Gln Val Phe
202 385             390                 395                 400
203 Glu Thr Leu Glu Glu Ile Thr Gly Tyr Leu Tyr Ile Ser Ala Trp Pro
204             405                 410                 415
205 Asp Ser Leu Pro Asp Leu Ser Val Phe Gln Asn Leu Gln Val Ile Arg
206             420                 425                 430
207 Gly Arg Ile Leu His Asn Gly Ala Tyr Ser Leu Thr Leu Gln Gly Leu
208             435                 440                 445
209 Gly Ile Ser Trp Leu Gly Leu Arg Ser Leu Arg Glu Leu Gly Ser Gly
210         450             455                 460
211 Leu Ala Leu Ile His His Asn Thr His Leu Cys Phe Val His Thr Val
212 465                 470                 475                 480
213 Pro Trp Asp Gln Leu Phe Arg Asn Pro His Gln Ala Leu Leu His Thr
214             485                 490                 495
215 Ala Asn Arg Pro Glu Asp Glu Cys Val Gly Glu Gly Leu Ala Cys His
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PATENT APPLICATION:  US/09/441,411           TIME: 15:46:18

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219 Val Asn Cys Ser Gln Phe Leu Arg Gly Gln Glu Cys Val Glu Glu Cys
220      530                535                540
221 Arg Val Leu Gln Gly Leu Pro Arg Glu Tyr Val Asn Ala Arg His Cys
222 545                550                555                560
223 Leu Pro Cys His Pro Glu Cys Gln Pro Gln Asn Gly Ser Val Thr Cys
224          565                570                575
225 Phe Gly Pro Glu Ala Asp Gln Cys Val Ala Cys Ala His Tyr Lys Asp
226          580                585                590
227 Pro Pro Phe Cys Val Ala Arg Cys Pro Ser Gly Val Lys Pro Asp Leu
228          595                600                605
229 Ser Tyr Met Pro Ile Trp Lys Phe Pro Asp Glu Glu Gly Ala Cys Gln
230      610                615                620
231 Pro Cys Pro Ile Asn Cys Thr His Ser Cys Val Asp Leu Asp Asp Lys
232 625                630                635                640
233 Gly Cys Pro Ala Glu Gln Arg Ala Ser Pro Leu Thr Ser Ile Ile Ser
234          645                650                655
235 Ala Val Val Gly Ile Leu Leu Val Val Val Leu Gly Val Val Phe Gly
236          660                665                670
237 Ile Leu Ile Lys Arg Arg Gln Gln Lys Ile Arg Lys Tyr Thr Met Arg
238          675                680                685
239 Arg Leu Leu Gln Glu Thr Glu Leu Val Glu Pro Leu Thr Pro Ser Gly
240      690                695                700
241 Ala Met Pro Asn Gln Ala Gln Met Arg Ile Leu Lys Glu Thr Glu Leu
242 705                710                715                720
243 Arg Lys Val Lys Val Leu Gly Ser Gly Ala Phe Gly Thr Val Tyr Lys
244          725                730                735
245 Gly Ile Trp Ile Pro Asp Gly Glu Asn Val Lys Ile Pro Val Ala Ile
246          740                745                750
247 Lys Val Leu Arg Glu Asn Thr Ser Pro Lys Ala Asn Lys Glu Ile Leu
248          755                760                765
249 Asp Glu Ala Tyr Val Met Ala Gly Val Gly Ser Pro Tyr Val Ser Arg
250      770                775                780
251 Leu Leu Gly Ile Cys Leu Thr Ser Thr Val Gln Leu Val Thr Gln Leu
252 785                790                795                800
253 Met Pro Tyr Gly Cys Leu Leu Asp His Val Arg Glu Asn Arg Gly Arg
254          805                810                815
255 Leu Gly Ser Gln Asp Leu Leu Asn Trp Cys Met Gln Ile Ala Lys Gly
256          820                825                830
257 Met Ser Tyr Leu Glu Asp Val Arg Leu Val His Arg Asp Leu Ala Ala
258          835                840                845
259 Arg Asn Val Leu Val Lys Ser Pro Asn His Val Lys Ile Thr Asp Phe
260      850                855                860
261 Gly Leu Ala Arg Leu Leu Asp Ile Asp Glu Thr Glu Tyr His Ala Asp
262 865                870                875                880
263 Gly Gly Lys Val Pro Ile Lys Trp Met Ala Leu Glu Ser Ile Leu Arg
264          885                890                895
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**VERIFICATION SUMMARY**                          DATE: 10/01/2002
PATENT APPLICATION:   **US/09/441,411**           TIME: 15:46:19

Input Set : **D:\409.app.txt**
Output Set: **N:\CRF4\10012002\I441411.raw**